

Appl. No. 10/779,514
Docket No. GP-302444/GM2-0083

REMARKS / ARGUMENTS

Status of Claims

Claims 1-22 are pending in the application and stand rejected. Applicant has canceled Claims 3 and 16, has amended Claims 1 and 14, and has added new Claims 23-24, leaving Claims 1, 2, 4-15 and 17-24 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §103(a), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Objections to the Specification/Abstract

The Abstract is objected to for informalities relating to word count.

Applicant has amended the Abstract as requested by the Examiner. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this objection.

Rejections Under 35 U.S.C. §103(a)

Examiner's Paragraph 4

Claims 1, 2, 5, 8-10, 13-15, 18-20 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson (U.S. Patent No. 5,473,133, hereinafter Peterson) in view of JP 5-285669.

Examiner's Paragraph 5

Claims 1, 5, 8-10, 14 and 18-20, stand rejected under 35 U.S.C. §103(a) as being unpatentable over any one of Costigan (U.S. Patent No. 4,901,135, hereinafter Costigan), Elofson (U.S. Patent No. 5,883,354, hereinafter Elofson), and JP 63-295072 (insofar as definite without a complete translation of the Japanese document) in view of JP5-285669.

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Examiner's Paragraph 6

Claims 1-10 and 12-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. (U.S. Patent No. 6,373,021, hereinafter Wang) in view of JP 5-285669.

Examiner's Paragraph 7

Claims 1, 5-11, 14 and 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gabbianelli et al. (U.S. Patent No. 6,566,624, hereinafter Gabbianelli) in view of JP 5-285669.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention *in such a manner as to perform as the claimed invention performs*. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Applicant has canceled Claim 3 and has incorporated all of the limitations thereof into Claim 1.

Applicant has canceled Claim 16 and has incorporated all of the limitations thereof into Claim 14.

As set forth above, the rejections under Examiner's Paragraphs 4, 5 and 7, do not apply to the subject matter of Claims 3 and 16, thereby leaving only the rejection under Examiner's Paragraph 6 for consideration, the other rejections having been obviated.

Regarding Examiner's Paragraph 6

The Examiner alleges that the combination of Wang and JP 5-285669 (the References) teaches each and every element of the claimed invention in such a manner as to perform as the claimed invention performs. Paper 091505, Paragraph 6.

In making such an allegation, the Examiner remarks that Wang discloses projections (circular protrusions 28a-28d arranged concentrically and having

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progressively smaller diameters)... such that the projections (28a-28d) have lengths ranging between 0.4 to 0.6 mm and are melted progressively during welding. Paper 091505, page 6.

The Examiner applies JP 5-285669 for its teaching of the use of a welding adhesive.

In comparing the References with the instant invention, Applicant respectfully submits that a prima facie case of obviousness has not been established because the Examiner has failed to show where the References teach or suggest each and every element of the claimed invention in such a manner as to perform as the claimed invention performs.

In amended Claims 1 and 14, Applicant recites, inter alia,

"...a second workpiece that is made of a material that conducts electricity and has a plurality of projections formed therein, wherein *a first set of said plurality of projections has a height and a second set of said plurality of projections has a different height...*"

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

Here, Applicant is specifically claiming a plurality of projections comprising a first set and a second set, wherein the projections of the two sets have *different heights*.

In rejecting the instant invention, the Examiner looks in Wang to the circular protrusions 28a-28d arranged concentrically and having progressively smaller diameters, and to the projections (28a-28d) having [base] lengths ranging between 0.4 to 0.6 mm that are melted progressively, to allege obviousness.

In the instant invention, the term "height" is used to mean the height of a projection. In Wang (Column 2, lines 22-34), the terms "diameter" (D) and "length" (l) are used to mean the diameter (not the height) of a protrusion (28a-28d), and the length (not the height) of the base of a protrusion (28a-28d), respectively. However, in alleging obviousness, the Examiner appears to be equating the Wang "length" to the claimed "height", which is contrary to the very disclosure of Wang, which discloses the

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protrusions (28a-28d) having a "height" (h). By referencing Wang at Figure 2C, "height" (h) is found to be constant, or at least not of different heights.

At Paragraphs [0023-0024] of the instant application, Applicant describes the progressive nature of how the projections of different heights progressively melt and collapse as the weld process takes place, thereby introducing a new projection to the weld process as the preceding projection melts and collapses. It is the very structure and method of welding that structure that Applicant claims as the invention.

In stark contrast with the instant invention, Applicant finds Wang (in combination of JP 5-285669) to teach a plurality of concentrically arranged projections *ALL* having the *SAME height*, which when welded progressively melt as a result of *FLEXING the work piece* (Column 1, line 38, and Column 2, line 55).

In view of the substantial differences between Wang (in combination of JP 5-285669) and the instant invention, Applicant respectfully submits that not only do the References fail to teach each and every element of the claimed invention in such a manner as to perform as the claimed invention performs, but the References also fail to recognize a problem (progressive welding with rigid, none flexible, workpieces) recognized and solved only by the present invention (weld projections of different heights).

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do what the patent Applicant has done, fail to recognize a problem recognized and solved only by the present invention, fail to offer any reasonable expectation of success in combining the References to perform as the claimed invention performs, and discloses a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. § 103(a), which Applicant considers to be traversed.

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In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §103(a), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

Applicant respectively notes that Claims 1 and 14 have been amended to include all of the limitations from Claims 3 and 16, respectively, which were similarly rejected for alleged obviousness. Accordingly, any new grounds of rejection necessarily cannot be necessitated by Applicant's amendment. MPEP 706.07(a).

New Claims 23-24

Applicant has added new dependent Claims 23-24 directed to different sets of projections having different base widths. In view of the foregoing discussion, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention in such a manner as to perform as the claimed invention performs. Accordingly, Applicant submits that new Claims 23-24 are directed to allowable subject matter, and respectfully requests entry and notice of allowance thereof.

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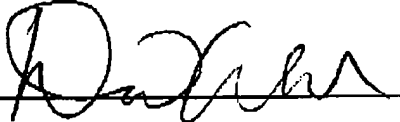
The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

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